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EXAMINER
LERNER, MARTIN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/057,523	WHITE ET AL.
	Examiner	Art Unit
	Martin Lerner	2626

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 January 2008</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>59, 61 to 66, 68 to 73, and 75 to 79</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>59, 61 to 66, 68 to 73, and 75 to 79</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 59, 61 to 66, 68 to 73, and 75 to 79 are objected to because of the

following informalities:

Regarding independent claims 59, 66, and 73, the terminology of "a

communication module" and "a remote device" leads to confusion because it does not

match what is disclosed by the Specification. Applicants' Specification, Figures 1 to 3,

provides for a local device and a remote system. However, it would appear that the

corresponding element for the remote system is "a communication module", and the

corresponding element for the local device is "a remote device". Thus, the inconsistent

terminology results in a local device being called a remote device and a remote system

being called a communication module. Moreover, both a local device and a remote

system could be described as "a communication module" because both have

communication functions for communicating with one another. Applicants are

requested to rename "a communication module" and "a local device" to provide more

consistency between what is described as local/remote and with what is disclosed by

the Specification. Similar considerations apply to dependent claims 64 to 65, 71 to 72,

and 78 to 79.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 59, 62, 64, 66, 69, 71, 73, 76, and 78 are rejected under 35 U.S.C. 103(a)

as being unpatentable over *Hughes et al.* in view of *Barclay et al.*

Concerning independent claim 59, *Hughes et al.* discloses a system for

accessing a remote voice recognition resource on a server from a telephone,

comprising:

"a communication module operable to receive input from the remote device and

to transmit data to the remote device for provision in an output response to a user of the

remote device" – server system 300 is attached to the LAN 250 via network interface

card 310 (column 5, lines 37 to 50: Figure 1); server system 300 is equivalent to "a

communication module"; a recognition resource remains in a Wait_Event state, and

processes an incoming telephone signal when a recognized word or phrase is spoken

("operable to receive input from the remote device") (column 8, lines 14 to 33: Figure 3;

a prompt is played out to the caller ("to transmit data to the remote device for provision

in an output response to a user of the remote device"), via a state table action (column

8, lines 59 to column 9, line 2; column 9, lines 29 to 45: Figure 4); a prompt is "data

transmitted to the remote device";

"wherein the communication module is further operable to detect an additional user input from the remote device and in response, to cause the remote device to cease provision of the output response to the user" – for barge-in, an application can specify that prompt output should be terminated in response to voice input (column 9, lines 29 to 45: Figure 4); barge-in, or cut-through, is a facility that is particularly useful for a voice processing application such as voice mail, where the caller is likely to encounter the same sequence of prompts repeatedly, and accordingly may be able to select a desired option without needing to listen to all of the prompt (column 8, line 59 to column 9, line 2);

"a processing module coupled to the communication module, the processing module operable to perform speech recognition on the received input" – speech recognition software 320 resides on, and is supported by, server system 300 (column 5, lines 37 to 50: Figure 1).

Concerning independent claim 59, *Hughes et al.* is concerned with processing telephony data between a server performing speech recognition and a client calling from a telephone. Implicitly, a voice processing system performs activities "for directing an action" on a caller's telephone, including playing a prompt, displaying text, and directing a call. However, *Hughes et al.* does not expressly disclose a limitation of "wherein the communication module is further operable to transmit a control signal to the remote device, the control signal for directing an action in the remote device". *Barclay et al.* teaches a client/server speech recognizer, where a server ("a communication module") receives input from a client ("a remote device") based upon

speech input issued by a user, performs speech recognition on the received audio input,

and transmits data for provision of an output response to the user. (Column 5, Line 65

to Column 6, Line 25: Figure 2B) Moreover, *Barclay et al.* discloses that control

information ("a control signal") is passed between a client and a server, where a

preferred embodiment involves a string of keyword-value pairs attached to a header as

control information. (Column 8, Lines 11 to 16) Specifically, when a server is sending

control information to a client, a keyword-value sequence allows the server application

to return a response to the user's speech input. The client program can then use the

keyword-value pairs to determine what action ("for directing an action") it should

perform, which could be for instance to display the transcribed speech to the user or to

fill in a form displayed to the user with values the server has computed from the speech

input. (Column 8, Lines 28 to 36) The communication of control information between

the client and the server allows a variety of speech applications to be performed over

the Internet, *e.g.* form-filling applications for airline reservation/ticketing. (Column 8,

Line 65 to Column 9, Line 8) It would have been obvious to one having ordinary skill in

the art to transmit a control signal from a server to a client to direct an action at a client

as taught by *Barclay et al.* in a voice processing system of *Hughes et al.* for a purpose

of permitting a variety of speech applications to be performed over the Internet.

Concerning independent claims 66 and 73, *Hughes et al.* discloses a method and

computer program product for accessing a remote voice recognition resource on a

server from a telephone, comprising:

"receiving an audio input from a remote device, the audio input based on speech input issued by a user" – a recognition resource receives an incoming telephone signal of a word or phrase (column 8, lines 13 to 33: Figure 3); a word or a phrase spoken by a caller is "an audio input" and "speech input issued by a user";

"performing speech recognition on the received audio input" – speech recognition software on server system 300 processes the incoming telephone signal, until it has recognized the word or phrase spoken, and returns recognized text; an application remains in a Wait_ Event state until a word or phrase is received (column 8, lines 13 to 33: Figure 3);

"transmitting data for provision in an output response to the user" – a prompt is played out to the caller (column 8, line 59 to column 9, line 2; column 9, lines 29 to 45: Figure 4);

"detecting an additional audio user input from the remote device" – a caller is allowed to make a spoken interruption of the prompt in a barge-in or cut-through facility (column 8, line 59 to column 9, line 2);

"transmitting a signal to the remote device to cause the remote device to cease provision of the output response to the user" – a state table action allows an application designer to specify that prompt output should be stopped in particular eventualities; for barge-in, an application can specify that prompt output should be terminated in response to voice input; one such eventuality is where the caller inputs a DTMF tone, which is recognized by appropriate software (column 9, lines 29 to 45: Figure 4); terminating a prompt output is equivalent to a signal that is transmitted "to the remote

device to cause the remote device to cease provision of the output response to the user".

Concerning independent claims 66 and 73, *Hughes et al.* is concerned with processing telephony data between a server performing speech recognition and a client calling from a telephone. Implicitly, a voice processing system performs activities "for directing an action" on a caller's telephone, including playing a prompt, displaying text, and directing a call. However, *Hughes et al.* does not expressly disclose a limitation of "transmitting a control signal to the remote device, the control signal for directing an action in the remote device". *Barclay et al.* teaches a client/server speech recognizer, where a server receives input from a client ("a remote device") based upon speech input issued by a user, performs speech recognition on the received audio input, and transmits data for provision of an output response to the user. (Column 5, Line 65 to Column 6, Line 25: Figure 2B) Moreover, *Barclay et al.* discloses that control information ("a control signal") is passed between a client and a server, where a preferred embodiment involves a string of keyword-value pairs attached to a header as control information. (Column 8, Lines 11 to 16) Specifically, when a server is sending control information to a client, a keyword-value sequence allows the server application to return a response to the user's speech input. The client program can then use the keyword-value pairs to determine what action ("for directing an action") it should perform, which could be for instance to display the transcribed speech to the user or to fill in a form displayed to the user with values the server has computed from the speech input. (Column 8, Lines 28 to 36) The communication of control information between

the client and the server allows a variety of speech applications to be performed over the Internet, *e.g.* form-filling applications for airline reservation/ticketing. (Column 8, Line 65 to Column 9, Line 8) It would have been obvious to one having ordinary skill in the art to transmit a control signal from a server to a client to direct an action at a client as taught by *Barclay et al.* in a voice processing system of *Hughes et al.* for a purpose of permitting a variety of speech applications to be performed over the Internet.

Concerning claims 62, 69, and 76, *Hughes et al.* discloses playing out a prompt to a caller (column 8, line 59 to column 9, line 2; column 9, lines 29 to 45: Figure 4); a prompt is "audio data" that is transmitted to the remote device, *i.e.* a caller calling from a telephone.

Concerning claims 64, 71, and 78, *Hughes et al.* discloses that a caller is calling from a telephone ("the remote device") (column 1, lines 8 to 25); implicitly, a caller's telephone is not capable of processing a caller's voice input by speech recognition.

4.   Claims 61, 63, 65, 68, 70, 72, 75, 77, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hughes et al.* in view of *Barclay et al.* as applied to claims 59, 66, and 73 above, and further in view of *Houser et al.*

Concerning claims 61, 63, 68, 70, 75, and 77, *Hughes et al.* discloses a commonly known voice processing system for speech recognition at a remote server from voice input at a caller's telephone that provides audio prompts and has a barge-in facility, but omits transmitting data including video data and a text message. However,

it is known to obtain various forms of information by an interface through speech

recognition, as in management of voice mail by speech recognition from a telephone.

Specifically, *Houser et al.* teaches an information system having a speech interface,

where a terminal unit 16 includes a processor for executing a speech recognition

algorithm to recognize spoken commands for accessing information transmitted by

information distribution system 12. Information distribution system 12 supplies or

broadcasts information to a terminal unit 16, where "information" includes, but is not

limited to, analog video, analog audio, digital video, digital audio, text services, such as

news articles, sports scores, stock market quotations, and weather reports, electronic

messages ("a text message"), electronic program guides, database information, and

software including game programs. (Column 5, Line 39 to Column 6, Line 14: Figure 1)

An objective is to provide a subscriber with access to information by a speech

recognition interface, which enhances the interface by allowing control using language

naturally spoken by the subscriber for implementation of tasks not easily implemented

using menu screens and key presses. (Column 2, Lines 19 to 29) It would have been

obvious to one having ordinary skill in the art to provide data to a subscriber in the form

of information including video and a text message as taught by *Houser et al.* in a voice

processing system including a barge-in facility of *Hughes et al.* for a purpose of

providing a subscriber with access to information via a speech recognition interface for

implementing tasks not easily performed by menu screens and key presses.

Concerning claims 65, 72, and 79, *Houser et al.* teaches that information is

retrieved from an information distribution center 12 in response to commands from

terminal unit 16 for accessing information transmitted by information distribution center

12 (column 5, line 39 to column 6, line 14: Figure 1); additionally, electronic

programming guide (EPG) data is accessed from an information provider 114-3,

including television schedule information arranged by time and channel, and transmitted

to subscriber units (column 22, line 19 to 51: Figure 2C).

Response to Arguments

5.   Applicants' arguments filed 14 January 2008 have been considered but are moot

in view of the new grounds of rejection.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Martin Lerner whose telephone number is (571) 272-

7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to

Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML
1/30/08

Martin Lerner
Examiner
Group Art Unit 2626